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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,359	12/30/2003	Ioan Sauciuc	42P18283	1189

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EXAMINER	
WEINSTEIN, LEONARD J	
ART UNIT	PAPER NUMBER
3746	

MAIL DATE	DELIVERY MODE
06/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/749,359	SAUCIUC ET AL.	
	Examiner	Art Unit	
	LEONARD J. WEINSTEIN	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *1-5,7,8,13,15-17 and 19-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6,9-12 and 25-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment of February 04, 2009. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 6, 7, 10-12, 25, and 27-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodson et al. US 2003/0062149 A1. Goodson teaches all the limitations as claimed for a method including the steps of: **[claim 6] (a)** orienting a pump or a compressor 300 without regard to a gravitational location (¶ 0176) of a heat source coupled to the pump or compressor 300, **(b)** determining a presence of a threshold amount of a fluid that is within the pump or the compressor 300 (¶0173), **(c)** condensing vapor of the fluid as it is present in the pump 300 or evaporating liquid of the fluid as it is present in the compressor 300 (¶0173); **[claim 7]** the step of checking a sensor coupled to the pump or compressor 300 (¶0177); **[claim 10] (d)** the step of repeating **(b)** and **(c)** until there no longer a threshold amount of the fluid in the pump or compressor 300

(¶0177); **[claim 11] (e)** after **(d)** applying power to the pump or compressor 300 (¶0177); **[claim 12] (f)** applying power to a heat source 50 coupled to the pump or compressor 300; **[claim 25]** powering on the pump 300 after condensing, or powering on the compressor 300 after evaporating (¶0173); **[claim 27]** the step of the method wherein fluid is within the pump and the pump is a liquid pump to force liquid through a system 100 (¶0186); **[claim 28]** and the step wherein the fluid is within the compressor 300 and the compressor 300 is a vapor compressor to force vapor through a system 100 (¶0173).

4. Claims 6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Eastman US 4,547,130. Eastman teaches all the limitations as claimed for a method including the steps of: **[claim 6] (a)** orienting a pump 14 or a compressor without regard to a gravitational location (abstract) of a heat source 40 coupled to the pump or compressor 14, **(b)** determining a presence of a threshold amount of a fluid that is within the pump or the compressor 14, **(c)** condensing vapor of the fluid as it is present in the pump 14 or evaporating liquid of the fluid as it is present in the compressor (abstract); **[claim 9]** cooling vapor within a liquid pump 14 to a condensation point by a thermoelectric cooler (col. 3 ll. 36-39).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eastman US 4,547,130 in view of Sauciuc et al. US 2003/0205364. Eastman teaches all the limitations as claimed for method as discussed but fails to teach the limitations taught by Sauciuc for method including the step of checking a sensor 24 (¶0027) coupled to the pump/compressor 10 wherein condensing comprises cooling vapor within a liquid pump to a condensation point (¶ 0028) and further comprising turning off the sensor 24 (¶ 0027) and a heat source 34, then turning on the pump 10 (0029) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify a method wherein a thermoelectric cooler was used, as taught by Eastman, to include the step of using a sensor, as taught by Sauciuc, in order to continuously in order to dissipate heat from an electronic device (Sauciuc ¶ 002).

Response to Arguments

7. Applicant's arguments filed February 4, 2009 have been fully considered but they are not persuasive.

8. With respect to the rejection of claims 6, 7, 10-12, 25, and 27-28 under 35 U.S.C. 102(e) as being anticipated by Goodson et al. US 2003/0062149 A1 the applicant argues:

a. With respect to claim 6, Goodson does not teach a pump that may be orientated without regard to a gravitational location of a heat source because the principle operation of the pump of Goodson requires it to be oriented so that the oxygen bubble are able to float upwards into a recombiner. The law of anticipation does not require that the reference teach what the appellant is

claiming but only that the claims on appeal "read on" something disclosed in the reference. See *Kalman v. Kimberly Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983).The examiner notes that the limitations as claimed to do specify an order in which a pump or compressor and a heat source must be located. Therefore a method in which a pump or compressor is located without regard to a heat source and subsequent step includes locating a heat source depending upon the location of the pump or compressor meets the limitations as claimed. There is no limitation that requires a heat source to have a pre-existing permanent location nor is there a step claimed where the heat source is located and then a pump or compressor is located.

b. With respect to claim 28, Goodson does not teach fluid within a compressor that is a vapor and compressor forces vapor through a system because a principle operation of Goodson is that of restraining hydrogen gas from passing through a cooling loop. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). The applicant cites ¶0173, lines 14-19 and ¶0174 lines 7-11 in

support of this argument however the examiner notes that also in ¶0173 it is disclosed

> [T]he application of potential and current to the solution in the pump 300 necessarily causes electrolysis, and the gas generated in the process must be managed. One option is to simply let the gas escape from the system along with the pumped fluid, as is described with reference to FIG. 21 hereafter. In such a system, the fluid is gradually depleted, and this can be tolerated fro system that are only used some of the time.

Goodson et al. US 2003/0062149, ¶00173. Here Goodson teaches a method in which a system is capable of permitting gas to flow through the system. Although this is not the preferred operation of system but Goodson teaches that it is permissible for systems which are not used frequently. Goodson infers that it is advantageous to reduce the complexity of operation for a system that will not be used frequently and thus does not teach away from this method, only that it would not be preferred for a system that was used more frequently. Therefore Goodson teaches the limitations of claim 28.

9. With respect to the rejection of claims 6 and 9 are under 35 U.S.C. 102(b) as being anticipated by Eastman US 4,547,130 the applicant argues that Eastman teaches away from orientating without regard to a gravitational location by requiring the absence of gravity. The law of anticipation does not require that the reference teach what the appellant is claiming but only that the claims on appeal "read on" something disclosed in the reference. See *Kalman v. Kimberly Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Eastman is a representative example of how broad the claimed limitations of claim 1 are and the range of types of prior art that read on the instant invention. The examiner notes that the limitations as claimed recite a method including

"orientating a pump or compressor without regard to a gravitational location of a heat source." As noted above this limitation does not require a heat source to have a pre-existing permanent location nor does it strictly limit the method to including a sequence of steps in which a pump or compressor is located after a heat source is located. The limitations merely require a pump or compressor to essentially be located, the fact that the gravitational location of another element, or that the other element have a gravitational location, is irrelevant for purposes of the claimed limitations because the only component that is being affected by the step claimed is the pump or the compressor.

10. With respect to the rejection of claims 26 under 35 U.S.C. 103(a) as being anticipated by Eastman US 4,547,130 in view of Sauciuc et al. US 2003/0205364 the applicant argues that the cited references do not describe the claim limitations or the benefits of overcoming the problems generally associated with the orientation of pumps or compressors. In response the examiner notes that the applicant appears to infer that the argument presented with respect to the rejection of claims 6 and 9 are under 35 U.S.C. 102(b) as being anticipated by Eastman US 4,547,130 applies to its use in a rejection of claim 26 under 103(a). The arguments directed toward the rejection of claims 6 and 9 have not been found to be persuasive; subsequently the rejection of claim 26 has been maintained. Further the examiner notes with respect to benefits of the instant invention all benefits of claimed invention need not be explicitly disclosed in reference to render claim unpatentable under 35 USC 103. See In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990). Since the claimed subject matter would have

been obvious from the references, it is immaterial that the references do not state the problem or advantage ascribed by applicant. See In re Wiseman, 201 USPQ 658.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art Unit 3746

/Leonard J Weinstein/
Examiner, Art Unit 3746